

REMARKS

Reconsideration and reexamination of the above-referenced application in view of the further remarks set forth below are hereby requested.

Claims 1 and 2 are now in the application and remain unamended.

The Examiner has maintained his rejection of Claims 1 and 2 under 35 U.S.C. §103 as being unpatentable over Tsuneta et al. in view of Jang and Kim. The Examiner states that it would have been obvious to to person of ordinary skill in the art at the time the invention was made to uniformly (wherein, the thickness of the coating at the corners is equal to the thickness of the coating on the vertical and horizontal walls) coat the inner surface of the funnel of Tsuneta et al, which includes the corners as well as vertical and horizontal walls for the purpose of providing the CRT of Tsuneta et al. with an inner conductive film from the electron gun to the screen portion which enables a high voltage to be applied uniformly accross the funnel and accelerates the electron beams from the electron gun to the screen as taught by Jang and Kim.

However, the Applicants' Claim 1 calls for (underlining added for emphasis) ... a funnel formed between the panel and the neck, and having a substantially rectangular cone portion contiguous to the neck, the substantially rectangular cone portion having rounded inside corners tangentially joining adjacent cone walls of the rectangular cone portion; ... and ... an inner graphite layer disposed on an inner surface of the funnel to form a path for transmission of the voltage, wherein the inner graphite layer satisfies the following condition: ...  $0.9 \leq T_d / T_h \leq 1.36$  ... where  $T_d$  is an approximate thickness of the inner graphite layer along each rounded inside corner tangentially joining adjacent cone walls of the rectangular cone portion, and  $T_h$  is an approximate thickness of the inner graphite layer disposed on inside horizontal walls of the cone portion.

Similarly, the Applicants' Claim 2 calls for (underlining added for emphasis) ... a funnel formed between the panel and the neck, and having a substantially rectangular cone portion contiguous to the neck, the substantially rectangular cone portion having rounded inside corners tangentially joining adjacent cone walls of the rectangular cone portion; ... and ... an inner graphite layer disposed on an inner surface of the funnel to form a path for transmission of the voltage, ... wherein the inner graphite layer satisfies the following condition:  $0.9 \leq T_d / T_v \leq 1.36$  ... where  $T_d$  is an approximate thickness of the inner graphite layer along each rounded inside

corner tangentially joining adjacent cone walls of the rectangular cone portion, and  $T_v$  is an approximate thickness of the inner graphite layer disposed on inside vertical walls of the cone portion.

The present invention provides for a uniform thickness of layering of graphite over a cathode ray tube rectangular cone portion's vertical surfaces, along tangentially-rounded corners to the cathode ray tube rectangular cone portion's horizontal surfaces. Accordingly, the Applicants submit that there is no suggestion to combine the Tsuneta et al., Jang and Kim references and result in the invention as claimed in either Claim 1 or Claim 2.

A rectangular cone portion is not rotationally symmetrical. The four corners thereof are formed with sudden curvatures rather than horizontal and vertical portions. The inner graphite layer is not uniformly applied on the inside corners as it is on the inside horizontal and vertical walls of the cone portion. Hence, a key aspect of the present invention is to provide an optimum thickness of the inner graphite layer formed on the rectangular cone portion, thereby, allowing stable transmission of a high voltage through the inner graphite layer.

However, the Applicants submit that Jang does not describe, teach or suggest a rectangular cone portion. Jang teaches eliminating lining graphite 8 on an area that faces the getter 10 or frittable getter 11 (See lines 1-8 of column 3). If Jang included a rectangular cone portion, the lining graphite 8 would not be uniformly coated on the inside corners of the rectangular cone portion when coated according to the coating method taught by Jang. Therefore, Jang's "uniformly coated" merely refers to the conventional method which provides uniform coating to the cathode ray tube having a circular cone portion, and not a rectangular cone portion.

Similarly, Kim discloses a circular yoke connection (see Fig. 3). As the yoke is mounted on the outside of the cone portion, Kim includes a circular cone portion. The Examiner indicates that Kim's "uniformly deposited" means "uniform thickness" of the graphite layer. The Applicants submit, contrary to the Examiner's understanding, that Kim's "uniformly deposited" actually refers to the consistency of the layered mixture of the graphite and the two oxides. However, even assuming the Examiner's understanding, the uniform thickness of the graphite layer of Kim's circular cone portion would be achieved according to the conventional method which provides uniform coating to the cathode ray tube having a circular cone portion, and not a rectangular cone portion as provided in accordance with the present invention.

Accordingly, the Applicants submit that Jang and Kim are not all concerned with the

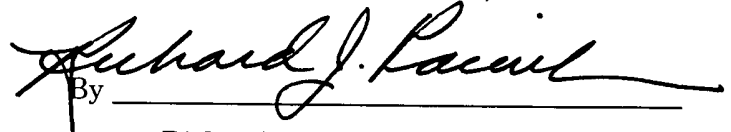
**Application No. 09/363,121**

rectangular cone portion, and as such, there is no suggestion to combine the teachings of Jang and Kim as to a circular cone portion with the teachings of Tsuneta et al. as to a rectangular cone portion.

Therefore, in view of the above remarks it is submitted that the claims are patentably distinct over the prior art and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above Application is requested.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

  
By \_\_\_\_\_

Richard J. Paciulan

Reg. No. 28,248

626/795-9900

RJP/cah

CAH PAS456416.1.\*-8/28/02 8:13 AM